

Noctis Landing

Take Home

1st EZ Workshop for Human Missions to Mars



EXCEPTIONAL SAFETY, SCIENCE, & SUSTAINABILITY

1 SAFETY

Access: Open AND Smooth Landing and Habitat Site
Trafficable: Safe AND Fast Access to Highlands Top, Lowlands Bottom, AND In Between

2 SCIENCE

Strategic Access to '**ALL**' Mars History & **MAX** Astrobiology Potential
Valles Marineris: EXPOSED Pre-Noachian + Noachian + Hesperian + Amazonian
PRACTICAL Horizontal Access, not just Unreachable Vertical Exposures
East Tharsis: YOUNGEST Volcanism on Mars.
Subsurface: SHALLOWEST Liquid H₂O. Likely Highest Regional Geothermal Gradient.

3 SUSTAINABILITY

Strategic H₂O: Massive Polyhydrated Sulfates, Ground Ice, Rock Glaciers, (Fog)
Rest of Mars.: Easy Access from High Alt Site (Hopper)

DATE NEEDED

Existing Assets: HiRISE, CRISM, HRSC
New Assets: Hi-Res Neutron + Hi-Res Radar. Drone.
Analog: HMP***: Topo, Terrain, Hydrated Sulfates, Ground Ice, Rock Glaciers, (Fog)